

## TUNABLE VOLTAGE CONTROLLED OSCILLATOR

### Abstract of the Disclosure

[39] A voltage controlled oscillator incorporating a ferroelectric capacitor in its resonant circuit is provided in order to provide superior phase noise performance and a  
5 linear control voltage/capacitance relationship. The resonant circuit may include multiple ferroelectric capacitors and multiple control voltages in order to provide band switching capability and/or increase the tuning range of the oscillator. The feedback loop of the oscillator may also incorporate a ferroelectric capacitor in order to adaptively optimize the feedback.